

EXHIBIT 109

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

ANDREW CORZO, SIA HENRY, MICHAEL
MAERLANDER, ALEXANDER LEO-
GUERRA, BRANDON PIYEVSKY,
BENJAMIN SHUMATE, BRITTANY TATIANA
WEAVER, and CAMERON WILLIAMS,
individually and on behalf of all others similarly
situated,

Plaintiffs,

v.

BROWN UNIVERSITY, CALIFORNIA
INSTITUTE OF TECHNOLOGY, UNIVERSITY
OF CHICAGO, THE TRUSTEES OF
COLUMBIA UNIVERSITY IN THE CITY OF
NEW YORK, CORNELL UNIVERSITY,
TRUSTEES OF DARTMOUTH COLLEGE,
DUKE UNIVERSITY, EMORY UNIVERSITY,
GEORGETOWN UNIVERSITY,
MASSACHUSETTS INSTITUTE OF
TECHNOLOGY, NORTHWESTERN
UNIVERSITY, UNIVERSITY OF NOTRE
DAME DU LAC, THE TRUSTEES OF THE
UNIVERSITY OF PENNSYLVANIA,
WILLIAM MARSH RICE UNIVERSITY,
VANDERBILT UNIVERSITY, and YALE
UNIVERSITY,

Defendants.

Case No. 1:22-cv-00125

Class Action

**EXPERT REPORT OF
ELIZABETH MORA**

May 14, 2024

This report contains material designated by Defendants as Confidential or AEO under the Second
Amended Confidentiality Order (ECF No. 608)

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I. Introduction and Assignment

1. Plaintiffs in this action received need-based financial aid from the Defendants while they were undergraduate students attending the Defendant institutions. Defendants¹ in this action are elite, private national universities that joined as members of the 568 Presidents Group for at least some period of time between January 1, 1998, and November 4, 2022. Counsel for the Plaintiffs and the Class inform me that Plaintiffs seek to represent a Class of similarly situated students that are attending or have attended the Defendants' institutions.

2. For purposes of this report, Counsel for Plaintiffs and the Class in this action have asked me to address the following issues in connection with Plaintiffs' claims against the Defendants based on their alleged participation in a conspiracy in violation of the antitrust laws relating to the 568 Presidents Group (the "Challenged Conduct") during the Class Period:

- A. The extent to which Defendants are complex organizations that operate like for-profit diversified conglomerates;
- B. The extent to which Defendants have flexibility in managing and spending their annual revenues and endowment earnings and growth on operations and programs;
- C. The extent to which Defendants compete with each other for personnel, prestige, and endowment size, returns, and growth;
- D. The reason institutional grants ("institutional financial aid")² are provided to students, including the extent to which aid is provided for altruistic

¹ The "Defendants" are Brown University ("Brown"), California Institute of Technology ("Caltech"), University of Chicago ("Chicago"), The Trustees of Columbia University in the City of New York ("Columbia"), Cornell University ("Cornell"), Trustees of Dartmouth College ("Dartmouth"), Duke University ("Duke"), Emory University ("Emory"), Georgetown University ("Georgetown"), The Johns Hopkins University ("Johns Hopkins"), Massachusetts Institute of Technology ("MIT"), Northwestern University ("Northwestern"), University of Notre Dame du Lac ("Notre Dame"), The Trustees of the University of Pennsylvania ("Penn"), William Marsh Rice University ("Rice"), Vanderbilt University ("Vanderbilt"), and Yale University ("Yale").

² I use the term institutional financial aid in this report to refer to grants and scholarships that universities provide to students. This term does not include grants from entities other than the universities. It also does not include institutional, federal, state, or private loans or work study.

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reasons that do not contribute to endowment maximization, and how institutional financial aid is treated for accounting purposes; and

- E. Whether the evidence and analyses I advance in this report have a common impact on the Class as a whole.

3. I address these topics based on my professional experience in higher education and in accounting and consulting for many universities throughout the country, as well as my work for for-profit entities, including public companies. This experience includes: the eleven years I spent in several financial roles at Harvard University from 1997 to 2008, including as Chief Financial Officer from 2006 through 2008; my knowledge about the operations of how other universities—especially those in the Ivy League, Caltech, MIT, and Stanford—operated, which I acquired during my time at Harvard; my experience as a board member of public companies; and, where relevant, additional research I conducted for this report, including a review of the Defendants’ annual reports. A list of the documents I relied upon in preparing this report is provided as Appendix D. My hourly rate for this matter is \$1,000 per hour regardless of whether Plaintiffs prevail and I have no financial stake in the outcome of this case.

4. Plaintiffs’ counsel has informed me that Plaintiffs define the proposed Class as follows: “All persons who have during the Class Period (a) enrolled in one or more of Defendants’ full-time undergraduate programs, (b) received at least some need-based institutional financial aid from one or more Defendants, and (c) whose tuition, fees, room, or board to attend one or more of Defendants’ full-time undergraduate programs was not fully covered by the combination of any types of institutional financial aid or merit aid (not including loans) in any undergraduate year.”³ Plaintiffs’ counsel have informed me that the Class Period is

³ The proposed Class does not include those for whom the total cost of attendance—including tuition, fees, room, and board for each undergraduate academic year—was covered by any form of institutional financial aid or merit aid (not including loans) from one or more Defendants.

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defined as follows, taking into account the definition of an “academic year” as the period including the Fall term to the following Summer term, based on the year the Fall term begins:

- A. For Brown, Dartmouth, and Emory—from Fall term 2004 through June 30, 2023.
- B. For Chicago—from Fall term 2003 through June 30, 2014.
- C. For Columbia, Cornell, Duke, Georgetown, MIT, Northwestern, Notre Dame, and Rice—from Fall term 2003 through June 30, 2023.
- D. For Penn—from Fall term 2003 through June 30, 2019.
- E. For Vanderbilt—from Fall term 2003 through June 30, 2020.
- F. For Yale—from Fall term 2003 through June 30, 2007, and from Fall term 2018 through June 30, 2023.
- G. For Caltech—from Fall term 2020 through June 30, 2023.
- H. For Johns Hopkins—from Fall term 2022 through June 30, 2023.

Plaintiffs’ counsel has informed me that the Class excludes:

- A. Any Officers⁴ and/or Trustees of Defendants, or any current or former employees holding any of the following positions: Assistant or Associate Vice Presidents or Vice Provosts, Executive Directors, or Directors of Defendants’ Financial Aid and Admissions offices, or any Deans or Vice Deans, or any employees in Defendants’ in-house legal offices; and
- B. Any person who was not a U.S. citizen or permanent resident at the time such person attended a full-time undergraduate program and received at least some need-based financial aid from one or more Defendants; and
- C. the Judge presiding over this action, his or her law clerks, spouse, and any person within the third degree of relationship to anyone living in the Judge’s household and the spouse of such a person.

⁴ For the avoidance of doubt, the Columbia University “Officers” excluded from the Class are members of the Senior Administration of Columbia University, and do not include exempt employees of Columbia University who are referred to as officers.

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II. Summary of Conclusions

5. My principal findings are that, like Harvard:
 - A. Defendants are complex organizations that, in many material respects, operate like for-profit businesses using sophisticated investment strategies;
 - B. Defendants have substantial flexibility in managing and spending their annual revenues and endowment earnings on operations and programs, including institutional financial aid;
 - C. Defendants compete with each other for personnel, prestige, and endowment growth and size;
 - D. Institutional financial aid is important for maintaining excellence and prestige, and is generally accounted for as a discount off tuition, not an expense of the institution;
 - E. Rather than serve an altruistic purpose, institutional financial aid is critical to secure acceptance from the most gifted students to thereby maximize endowment growth over time;
 - F. The evidence and analyses I rely on in this report are common to the proposed Class as a whole.

III. Personal Qualifications

6. I have over three decades of experience in high-level positions in both the private sector and at Harvard University.

7. I began my professional career after graduating with a B.A. in Political Science from the University of California, Berkeley and an M.B.A. from the Simmons University Graduate School of Management. My first position was as a staff accountant at Coopers & Lybrand (C&L, now PWC) in the audit practice from 1989 to 1991. I was certified as a public accountant in the Commonwealth of Massachusetts in 1991, which was also the year I moved internally within C&L to the National Regulatory Consulting Practice (RCP). I remained in that position as a senior manager until 1997, when I joined Harvard University, as discussed below.

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8. Within the RCP, I worked with colleges, universities, and research centers and institutes around the United States on issues of compliance with federal regulations, reimbursement of federal grants and contracts, animal care facility rates, human subject protocols, Internal Review Board (IRB) set-up and audit issues, institutional organization and management, training for faculty on cost charged to federal awards, what it meant from an institutional perspective to be a recipient of a federal award, and issues involving federal award oversight from the Offices of Inspectors General. These topics were of the utmost importance to many research universities, especially in light of the doubling of the budget of the National Institutes of Health (NIH) during the Clinton Administration. This meant many more universities in the southern and western U.S. became recipients of federal awards—in some cases, for the first time. Many did not have sufficient infrastructure to support the compliance and training needed to conduct federal awards. My advisory practice thus involved my advice on the foregoing topics outlined in this paragraph to many universities, including their boards and boards of regents. Appendix B lists my RCP clients during this period. My job duties at C&L also included the conduct and oversight of audits. Appendix C lists my audit clients while I was at C&L.

9. I held multiple leadership positions at Harvard from 1997 to 2008. By way of background, the late 1990s represented a time of seismic shift at the University. We were putting in a new Enterprise Resource Planning (ERP) system (Oracle), moving from a chart of accounts with 14 digits, largely kept on index cards, to a 33-digit chart of accounts in the Oracle ERP. A wholesale shift of this magnitude required new employees with real expertise and talent gained in the commercial sector to bring to bear. I was recruited in 1997, as part of this shift, to be the Director of Cost Accounting for the University. In this role I developed and oversaw the

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University's three indirect cost rates applied to federal grants and contracts: Faculty of Arts and Sciences (FAS) and main campus, Harvard Medical School, and Harvard School of Public Health.

10. In 1998, I was promoted to Harvard's Director of Sponsored Research for the University; my primary responsibility was to oversee approximately \$800 million annually in sponsored revenue. In this role, which I held until 2003, I was responsible for the pre- and post-award functions associated with grant and contracts, including the financial reporting and letter of credit drawdowns. I worked with faculty members in the proposal stage on budgets, award strategy, and interdepartmental and interschool grant proposals. As part of my duties as Director of Sponsored Research, I also represented sponsored programs and cost accounting on the leadership team in charge of the ERP implementation. The ERP project took four years to complete and required \$65 million in external costs. In 2004, I was appointed to be Harvard's Associate Vice President of Sponsored Research.

11. After serving as an interim CFO for several months, in 2006 I was named CFO of the University, a position in which I served until 2008. When I was appointed, Harvard's total annual revenue was approximately \$3 billion. As CFO, and thus as a member of the University President's senior staff, I was responsible for the University's budgets, reporting, audits, internal audits, sponsored research, interdepartmental money transfers, and school assessments. I convened the financial deans of each school regularly to discuss University trends and issues. I was a member of the Allston Task Force overseeing the Strategic Infrastructure Fund (SIF) usage for the Allston Development Projects. I negotiated transactions between and among schools, including real estate deals and shared assessments.

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12. As CFO, I also was the University's liaison to and sat on the board of directors of the Harvard Management Company (HMC), which managed the endowments of the University and its various schools. In 2005, I ran the search for a new president of the HMC. Mohammed El-Erian, from PIMCO, was chosen for this position, but he stayed only about a year because he had been drawn to the position by then-Harvard President Lawrence Summers, who announced his resignation in 2006, the day after El-Erian arrived. I ran the search for the HMC to replace El-Erian.

13. From 2008 to 2020, I was CFO and then Chief Administrative Officer (CAO) at the Charles Stark Draper Laboratory. Draper is an independent, not-for-profit research and development corporation that spun out from MIT in the 1970s; it performs work for the government and private sector with approximately \$800 million in annual revenue. In my capacities at Charles Stark Draper, I had responsibility for all functions of the Lab except engineering, which included finance, legal, grants and contracts, facilities, IT, security, HR, media services, IP and Tech Transfer, internal audit, and real estate.

14. Since 2020, I have served as a director on the following public company boards:
- A. MKS Instruments (NASDAQ: MKSI), a semi-conductor equipment and laser company, with approximately \$4 billion in annual revenue. I have served on the board from 2012 through the present time, including as chair of the Audit Committee and as a member of the Compensation Committee.
 - B. Inogen (NASDAQ: INGN), a portable oxygen therapy device company with approximately \$400 million in annual revenue. I have served on this board from 2021 to present, as board chairperson.
 - C. Limoniera Company (NASDAQ: LMNR), a lemon and avocado grower and real estate development company, with approximately \$250 million in annual revenue. I have served on this board from 2021 to present, and as chair of both the Compensation and Nomination/Governance Committees.
 - D. NUBURU Inc. (NYSE American: BURU), a blue-laser company serving commercial and government interests. I have served on this board from

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2023 to present, and serve as the Audit Committee chairperson and lead independent director.

15. My curriculum vitae is attached as Appendix A.

IV. Higher-Education Industry Experience

16. My responsibilities and duties at Harvard required me to gain familiarity with and knowledge about the ways in which many other universities operated. I was able to do this by participating in various forums where university leaders would gather regularly with their counterparts from the other Ivy League schools, Caltech, MIT, and Stanford. In addition, with the help of my staff, I kept up-to-date with the relevant literature about other elite, highly selective, private national universities, the financial issues they faced, how they were organized, and how they operated.

17. More specifically, I participated in the following forums where I learned about, and exchanged views with, other participants holding senior leadership positions at other universities: The CFO forum, called the Listening Post; the Research Administration Directors group, called Little XI; and the Director of Cost Accounting group, called NECA (Northeast Cost Accounting Group). We would meet two or three times a year to discuss recent events and compare campaigns, endowment-related issues (such as endowment growth and earnings performance), research funding, capital expansion, and other matters:

- A. The Listening Post is a group of CFOs from Brown, Harvard, Yale, Johns Hopkins, Columbia, Cornell, Caltech, Princeton, Penn, MIT, and Stanford. We would discuss and analyze how we were operating and how we were spending our funds, how our endowment performance was trending, and what big issues we were having—including faculty recruitment, capital campaign phases, alumni feedback, senior staff recruitment, campus expansion, summer programs, executive education, auxiliary activity, audit issues, public legal issues, use of consultants for projects to supplement staff, IRS Form 990 reporting, and ERP projects and cost. Schools took turns hosting these meetings. The meetings included a dinner

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followed by a morning meeting and were adjourned by noon so people could travel back to their home institutions.

- B. The Little XI included the same schools as the Listening Post but at the level of Director of Sponsored Research. The issues discussed included A-133 audits, faculty training, strategy with Department of Health and Services negotiators, library studies, and compliance and reporting issues relating to the indirect cost rate on research grant proposals. Schools took turns hosting these meetings and they would typically include an event in the host city such as a Red Sox game or an American Repertory Theatre play, if Harvard were hosting. These meetings were two days and one night.
- C. NECA included the same schools at the Listening Post and the Little XI, but at the level of Director of Cost Accounting, or a level below Director of Sponsored Research—usually a direct report to the Director of Sponsored Research—together with government officials. This group included representatives from the government (OMB, HHS, Office of IG) as regular attendees as well as invited guests and consultants who subsidized the meetings. These sessions were held over two days at the Harriman Estate, owned by Columbia University in Orange County, New York. Universities would make presentations to the group on new compliance systems they were implementing, faculty training materials to share with others, and compliance handbooks.

18. As part of my various job duties at Harvard, my staff and I would read and seek to understand the various secondary-source rankings of educational institutions to compare where we stood in those ranking compared to other universities, especially other Ivy League schools, MIT and Stanford (“Harvard’s primary peer universities”) on various metrics, including endowment dollar size, annual rates of return, number of faculty who were Nobel laureate recipients, student-faculty ratio, number of sports teams, and student clubs. Many of the HMC fund managers had worked with or knew of David Swenson, Yale’s long-time endowment chief, who was an innovator in his investment strategies I discuss in Paragraph 45 below, and so of particular interest was Yale’s endowment return. There were charts and graphs created to compare the performance of Harvard’s endowment with that of Harvard’s primary peer universities. These materials were shared internally with the governing boards.

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19. In addition to my personal experience that I have brought to the preparation of this report, I have also examined annual reports of Defendants and publicly available information about them. I have referenced these sources, and also provide a list of the other documents on which I have relied, in Appendix D.

V. Critical Ways in Which Defendants Operate Similarly to Diversified For-Profit Conglomerate Businesses

20. Although there are differences in scale and scope among the Defendants, all have large financial endowments and are highly diversified private universities, as is Harvard. All broadly operate in ways that are similar to public companies, especially diversified conglomerate businesses.

21. First, Harvard and the Defendants have large numbers of employees, a characteristic shared with many public companies. For example:

- A. The Defendant with the smallest number of students, Caltech, still had over 11,600 employees as of fiscal year end 2022 (Table 1). Caltech administers and manages the world-famous and federally funded Jet Propulsion Laboratory, and its approximately 6,000 employees are employees of Caltech. By comparison, Limoneira, a public company on whose board I now serve, had just 265 employees as of the end of 2022 (Macrotrends, n.d.).
- B. Each Defendant had employment totals far exceeding the Limoneira payroll—even the Defendant with the smallest number of employees, Dartmouth, which had approximately 9,200 employees as of fiscal year end 2022 (Table 1).
- C. Indeed, the Defendant with the largest number of employees, Penn, with over 56,000 at year-end 2022, (Table 1), had more employees than the 16th-ranked public company (by revenue) on the Fortune 500, Chevron, which employed 42,595 employees at year end 2023 (Fortune, 2022).
- D. Harvard, with over 34,000 employees as of fiscal year end 2022 (Form 990, 2022), had far more employees than Marathon Petroleum with 17,700 employees (ranked 19th by revenue on the 2022 Fortune 500 list), Phillips 66 with 14,000 employees (ranked 29thX by revenue on the 2022 Fortune 500 list), and Valero Energy with 9,804 employees (ranked 30th by

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revenue on the 2023 Fortune list) (Table 1; Fortune 500, 2023). By comparison, employment totals at the following Defendant universities, as of fiscal year-end 2022, exceeded the 2022 Marathon total of 17,700 employees: University of Chicago (26,838); Columbia (37,144); Cornell (41,865); Duke (29,863); Emory (24,580); Johns Hopkins (23,390); MIT (25,671); Northwestern (24,446); Penn (56,699); and Yale (31,105) (Table 1).

22. Second, Harvard and each Defendant has dozens of academic departments and multiple schools offering some combination of undergraduate, graduate, and professional degrees. Most of the Defendants (13) have medical schools⁵ and university-owned hospitals, which are major commercial operations that generate revenue, although Harvard is relatively unique in that it does not own or operate its own hospital. At Harvard and each Defendant, it appears each of the different schools within the universities has its own dean, responsible for the operations and budgets of those schools. Each academic department has its own chair, often with similar responsibilities. As at Harvard, Defendants have athletic departments, many offer executive education programs (discussed in more detail in Paragraphs 24 and 25 below), and many have academic publication presses, all with their own heads and separate budgets, and all generating revenue. At the hub of all of these spokes stands the central administration of each Defendant, overseen by a president, assisted by numerous other high-level officers. The multiplicity of separate academic departments, schools, and other divisions within each Defendant is analogous to the structure of many, if not most, public companies—even if they are not technically a conglomerate business with a single holding company and many separately incorporated subsidiaries.

⁵ Of the 17 Defendants, only the following institutions do not have medical schools: Caltech, MIT, Notre Dame, and Rice.

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23. As CFO at Harvard, for example, I was a leader within the university's "Central Administration," known on campus as the "Center." The Center provided multiple services to the various "Schools," known on campus as the "tubs." The tubs had their own financial deans, facilities deans, academic deans, and administrative staff, with separate operations for educational services and research services. Each tub "operated on its bottom," which meant that it had its own endowment, and which meant that, with exceptions for the less well-endowed schools, as I explain next, each school had to at least match revenues and expenses, and several were expected by their deans to generate revenue significantly in excess of expenses. Based on my experience and review of the information for this assignment listed in Appendix D, it is my opinion that Defendants operated in a similar way, although perhaps not to the extreme extent as the "every tub on its own bottom line" model employed at Harvard.

24. Third, as in most businesses, there are revenue generators ("breadwinners") and "loss leaders" within universities. At Harvard, the breadwinners were the well-endowed schools of Business, Law, Arts and Sciences, and the loss leaders were much less well-endowed schools of Divinity, Education, and Design. The John F. Kennedy School of Government and schools of Engineering and Public Health were each more or less "breakeven" operations. CFOs and other leaders of public companies operate in a similar fashion. At Limoniera, for example, the company's mission is to be the largest avocado and lemon grower in the United States. If we make a small profit doing this, we are doing well. To offset what may be drought years or unusually cold years where the crop yield may be low and thus our agri-business not profitable, we have a real estate development portfolio that helps to offset those losses. Based on my experience and review of the information for this assignment listed in Appendix D, Defendants operated in a similar fashion.

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25. Harvard Business School (HBS) was, and I believe still is, at the forefront of entrepreneurship at Harvard, and a major “breadwinner” even apart from having its own substantial endowment. For example, HBS used its facilities during the summer for executive education—a lucrative operation, where attendees (or their company sponsors) pay as much as \$50,000 for courses over very limited time periods. Special executive education dorms and dining halls were built with state-of-the-art conference centers. The HBS financial dean referred to this executive education program as the “cash cow.” I recall meeting with the dean of the School of Education and suggesting she set up something like this at the Ed School during the summer when I was there, albeit less costly for attendees. She agreed and the summer program is still in place.

26. All but one of the Defendants (Caltech) also operate similarly lucrative executive programs granting Master of Business Administration degrees, or their equivalents, as well as shorter-term educational programs. Caltech does still offer executive education through its Center for Technology and Management Education department, however.

27. Fourth, as in corporations, there is ample discretion within universities, including Defendants, as to how money is spent each year. The discretion is a matter of priorities. As Harvard’s CFO, I was in the middle of discussions and decisions about spending priorities during every annual budget cycle, as well as within the course of each year. Spending priority decisions also had to be made at the school level, generally by the deans, analogous to spending priority decisions made by corporate managers within different business units. Based on my conversations with counterparts at other universities and my knowledge of higher education, it is my opinion that Defendants operated in a similar fashion, with a similar degree of discretion.

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28. Every year in the larger school budgets at Harvard, for example, there was a line item labeled “dean’s priorities,” with no corresponding detail. The type of items showing up as “dean’s priorities” would be new faculty appointments, increased housing allowances, augments to senior staff, and supplements to the retention budgets. In addition, from time to time, the Deans would collaborate with the President on strategic initiatives and projects. When this happened, there would be efforts to be creative about the ways in which costs were allocated. For example, such initiatives often entailed the recruitment of “stars” at other universities, but especially at Harvard’s primary peer institutions, including Stanford, MIT, Yale, and Princeton, which could require offering a “package deal” that included a faculty position for the star’s spouse, including an offer of tenure to both individuals. Given the lavish nature of some of these costs, I would be asked to find ways to put those expenses in broader expense categories so that they could not be separately identified for reason of confidentiality. From my conversations at the various peer forums listed above, I learned that at Harvard, we were not the only ones engaged in creative thinking about cost allocation. Other examples included the Princeton Library’s cost allocation and Columbia’s cost allocation for housing.

29. Fifth, the governance structures of Harvard and the Defendants are similar to those of public companies. Like public companies, Harvard and the Defendants have presidents who are hired and can be fired by, and report to, a board of some type (typically trustees, in the case of universities). Like public companies that have multiple stakeholders, including boards of directors, shareholders, employees, and customers, Harvard and the Defendants also have multiple stakeholders: trustees, faculties, students, alumni, donors, and bondholders. Donors are critical sources of capital for elite, highly selective, private national universities, which owe their

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elite status to large and growing endowments, and can have major influence on university policies, much like large shareholders at public companies.

30. Sixth, like business conglomerates, which tend to have substantial numbers of executive and administrative staff members that oversee various business units, institutions like Harvard and the Defendants also have large executive and administrative staffs tasked with overseeing the operations of many academic departments, separate schools, and departments.

31. Seventh, like the many business conglomerates that have substantial real estate holdings, both to house their corporate activities and as landlords for commercial tenants (such as restaurants and the like) operating out of corporate-owned buildings, Harvard and the Defendants also are major landowners and landlords in other respects as well:

- A. Harvard relied on sophisticated lawyers and brokers to maximize returns on its real estate sales and rentals. Harvard began an extensive expansion of its real estate portfolio and operation in the late 1990s with the purchase of 200 acres of land in Allston, Massachusetts, which it is still in the process of developing. Indeed, Harvard now owns more land in Allston than it does in Cambridge. The 10-year plan for Allston, beginning this year, calls for 1.4 million square feet of new construction and 500,000 square feet of renovations. The Paulson School for Engineering and Applied Sciences has been built in Allston at the cost of approximately \$1 billion. The School of Public Health will be built there, and the American Repertory Theatre is in the process of being relocated there. There will be a 900,000 square foot Enterprise Research Campus of mixed-use development including residential, lab, hotel, and restaurant space.
- B. Many Defendant universities similarly have major real estate portfolios. Cornell owns over 19,000 acres of land and buildings and another 420,000 acres of mineral rights (Cornell University, n.d.). Columbia reportedly owns the most private land in New York City with nearly \$4 billion worth of real estate (Caron, 2023). Caltech's 2020 endowment report boasted that the decision to invest in multi-family housing instead of office or retail real estate was responsible for significant returns that year (Richland, 2020). Duke manages over 4.5 million square feet of leased office and tech space and oversees a 7,000 acre forest (Duke University). Penn reportedly owns nearly 1,000 acres of land worth over \$3 billion in Pennsylvania (Scott, 2022).

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VI. Defendants Have Multiple Revenue Sources that Provide Flexibility for Operations and Programs

32. As I outline in detail in this section, Harvard and the Defendants have multiple sources of revenue that give them substantial flexibility in how much they decide to spend on specific line items within their operating budgets, including on institutional financial aid (as a discount from tuition, as discussed below in Section VIII). This is true even at a university like Harvard, where every tub operates on its own bottom line, because each tub draws revenues from multiple sources, including endowments, while the deans can trade off how much they spend on some items versus others. Moreover, as I discuss below in Paragraph 23, at Harvard the Center worked at leveling the financial playing field among the lesser and better endowed schools, or tubs. For Defendants operating in a more centralized fashion, spending flexibility across schools or departments would be even greater.

33. Harvard and the Defendants are well-endowed, diversified universities, with many sources of revenue. These universities have an important advantage over many for-profit companies, including conglomerates. Because elite universities' educational services are always in such high demand, their revenues are less cyclical than those of much of the business sector. Indeed, it was often said at Harvard that applying to Harvard was "inflation proof." There will always be many more people who want to come than we can accept. This is true of the Defendants as well, where acceptance rates are now typically at 10 percent or less.

34. In addition, despite the ups and downs of the prices of the various types of assets in which the endowments of Harvard and the Defendants are invested, the formulae for spending out of these endowments to support university operations (the "endowment contribution") typically are based on a multi-year average of asset values. This aspect of the formulae, typically also combined with a component that increases the previous years' spending by a certain

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percentage amount (the so-called “stability” component of the spending formula), smooths out the endowment contribution from year to year, reducing the cyclicity of the endowment’s contribution to annual revenues.

35. Given their large endowments, Harvard and the Defendants also operate on a longer time horizon than for-profit companies. The publicly reported founding dates indicate that Harvard is 388 years old, Yale is 323 years old, Penn is 275 years old, Dartmouth is 255 years old, and all the other Defendants are at least 100 years old. Elite, highly selective, private national universities like Defendants not only have the advantage of multi-billion-dollar endowments that enable them to withstand a range of economic forces, but also attract the very best students and inculcate them with a “give-back” or donor mentality to support the institutions that have given them the tools and peer and mentor networks to succeed after they graduate. Accordingly, these universities can be confident that their students-turned-alumni collectively will add substantially via their contributions to both the operating funds for the universities and to the corpus of the universities’ endowments into the indefinite future. Awareness of this long-term perspective is especially important when it comes to understanding the role of institutional financial aid, or, more properly, cost of attendance discounting, as I discuss in the next section.

36. Before going into detail about each of the various sources of revenue for Harvard and the Defendants, it is important to recognize that all of them reported annual revenues above \$1 billion as of fiscal year end 2022, as shown in Table 1. These revenue figures are well above the revenues of many public companies (Murphy & Tucker, 2023).⁶ In addition, because they are

⁶ This article lists the top 100 small-cap public companies, the vast majority of which had 2023 revenues less than \$1 billion.

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legally organized as non-profits, Defendants do not pay corporate income taxes, except on certain small segments of income such as rental income from non-university activities.

37. One other fact about revenue maximization is important. At Harvard, since each of the tubs operated independently, each sought to maximize revenues in its own ways. I understand from the Complaint in this case that one of those tubs, the undergraduate school, or the Faculty of Arts and Sciences (FAS), is especially relevant to this litigation. I also understand that at each of the Defendant institutions, each school within the overall university structure (meaning the separate undergraduate schools, such as a business school, or an engineering school, perhaps the entire undergraduate school and the graduate school, and any one of several professional schools) likely would have operated as a tub on its own bottom line, and thus each sought to maximize its revenues.

A. Tuition

38. All universities charge tuition, fees, and room and board, the combination of which is widely referred to as the “cost of attendance” (COA). For students who live off campus, typically in rental housing surrounding the campus, COA includes some form of equivalent to campus-based housing.

39. The sticker price for the COA for undergraduate students at Harvard and the Defendants is currently over \$80,000 annually, substantially higher than the COA at public universities. This is true for a number of reasons. One factor is the high cost of delivering an education at Harvard and Defendants, driven in large part by high and rising salaries that top quality faculty can demand. A second factor is that high prices reflect the limits that Harvard and Defendants place on their enrollments, which these universities impose to ensure an elite status. As evidence of this, applications for undergraduate admission each year at Harvard and

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Defendants far exceed the numbers of acceptances. In theory, these universities could charge a COA in amounts reflecting what the market would allow. But doing so not only would enable only students from very wealthy families to attend, but also would be inconsistent with the desire to maximize prestige and represent publicly a mission of educating more of the population than the rich and elite.

40. At Harvard, each of the schools, or tubs, would propose sticker tuition prices based on the prices of the prior year and its particular peer group. The Center approved the increase and the tuition number, which then was formally approved by the Corporation. University officials tried to have the various schools' sticker tuition remain in the middle of the pack among competitor schools and to make sure we never went down in our cost of tuition.

41. As I discussed in Paragraphs 24 and 25 above, the tuition and fees for university executive education programs typically far exceed the costs of delivering these programs, which makes "exec ed" an important profit center for the universities that offer these programs. These profits are used to subsidize the offering school's general operating expenses.

B. Distributions from the Endowment

42. Annual distributions from endowments are also a major revenue source for well-endowed, private universities, such as Harvard and the Defendants. These distributions, commonly referred to as the "spending rate" out of the endowment, are determined by university trustees, typically by formulae. At Harvard, as for the Defendants, the spending rate formulae change from time to time, reflecting the operating needs of the university and additions to the endowment, including the earnings performance of the endowment assets.⁷

⁷ One example is DARTMOUTH_0000352935.

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43. At Harvard, I recommended a spending rate from the endowment annually, subject to approval by the Corporation. The endowment spending rate was set in line with spending rates of other elite, highly selective, private national universities. The standard spending rate was 5% of the market value of the endowment, averaged over several years. In particular, while I was CFO, Harvard's President would sometimes ask and obtain payment from the endowment for special interest projects. I knew about these transactions because I would be tasked with executing these instructions.

44. At Harvard, the HMC operated under the umbrella of the University but was even more like a for-profit entity. The offices of the HMC were located several miles away from the main campus, in the Federal Reserve Building on Atlantic Avenue, in a space overlooking Boston Harbor. The space was outfit with oriental rugs, antiques, and deep leather chairs. The employees were compensated on returns, on top of large base salaries. The HMC group were thought of as "the people behind the curtain." Jack Meyer, the CEO of the HMC before Mohammed El-Erian, would come once a year to talk to the financial deans' group and read from scripted material.

45. The Harvard endowment (collectively, summing the endowments of the individual schools, or tubs, within the University) invested in a range of assets beyond just bonds and equities. In this respect, we especially followed Yale, whose endowment was led by David Swenson, a well-known advocate for investments in "alternative assets." Swenson's investment philosophy has been widely adopted by well-endowed universities, including those of the Defendants.

46. For example, when I was on the HMC board, the endowment made major investments in timber and forests in Australia and New Zealand. These assets were viewed as

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inherently undervalued and destined to bring a handsome return over time. The endowments at Harvard and Defendants also invest in private equity and venture capital limited partnerships, among other alternative assets.

47. The endowment at Harvard, as at Defendant universities, was managed to generate annual returns that, on average over time, would cover at least the annual distribution rate of approximately 5% plus estimated long-run inflation, which was generally assumed to be about 3%. This approach meant a minimum annual rate of return of 8%, which would preserve the purchasing power of the endowment over time, while also supporting university operations. In fact, Harvard's annualized rate of return from 2003 to 2022 exceeded the 8% threshold. The Defendants have been incredibly successful in their approach, as evidenced in part by the growth of Defendants' endowments from 1994 to 2021—even the minimum endowment growth by Emory University represented a 388% increase, with the largest increase being 2,460% by the University of Notre Dame (Second Amended Complaint, Appendix A, 2023).

48. At Harvard, and at Defendants, endowments were and are nominally divided between “restricted” and “unrestricted” assets, and regularly reported as such. Technically, restricted endowment meant that the principal was to be used only for the purpose designated by the donor. For example, when I was at Harvard, about 85% of the endowment was considered “restricted,” meaning designated for a particular purpose.

49. But in reality, a substantial portion of the *distributions* from restricted endowment funds were not really “restricted.” This is true for three reasons. First, the spending from the income on restricted endowment principal was not always restricted; whether the income was restricted depended on the parameters set by the donor of the restricted contribution. Second, in instances in which the principal was intended for the purpose of a gift (such as for a building,

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professorship, and the like), there were occasions where we asked the donor, or his or her successors, to lift the restriction, and the donors agreed. Third, a substantial portion of the support from restricted contributions frees up other sources of revenue earned by the university to be spent on operations, such as for faculty salaries or research. In this sense, then, a substantial portion of the nominally designated “restricted” endowment earnings was for practical purposes fungible with other university revenue resources. These factors, taken as a whole, demonstrate flexibility in and fungibility of university funding for operations from the endowment.

50. At Harvard, we regarded the unrestricted endowment funds, and the annual returns on it (within our spending rule), as a source for the working capital of the university as a whole and for special projects, as needed. It is my understanding based on my extensive interactions with financial officers of other elite universities, and review of their annual reports, that the foregoing was also true at the Defendants.

C. Grant and Contract Revenue

51. Harvard regularly received substantial grant and contract revenue from the federal government for research. While I was there, for example, federal grant revenue typically generated several hundreds of million annually for Harvard. In 2022, federal grants provided more than \$600 million in revenue to Harvard. As illustrated in Table 1, federal grant revenue is also an important revenue source for each of the Defendants, providing over \$1 billion in total revenue in 2022 for Chicago, Columbia, and Johns Hopkins (Table 1).

52. Likewise, Harvard and the Defendants receive research funding from corporate sources and from private gifts from wealthy donors. For example, Harvard extended its research portfolio through a joint partnership with MIT and the Harvard Hospitals through the inception of the Broad Institute for Genomic Research, the Ragon Institute for AIDS, and the Wyss

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Institute for Bioengineering. These research centers all were founded through multi-million-dollar private gifts made to Harvard, MIT, and the Harvard Hospitals with the explicit expectation that if any of these parties did not participate, the gift would move elsewhere. Other examples include the hundreds of millions of dollars donated to fund the New Institute for Biomedical Research Education and the Columbia University Herbert and Florence Irving Medical Center at Columbia; the Brown Institute for Basic Science, the Resnick Sustainability Center, and the Brinson Foundation at Caltech; the Yale Schwarzman Center at Yale; and the Duchossois Family Institute at the University of Chicago.

D. Annual Donations

53. Annual donations are another important source of operating revenue, so much so that the Development Office (or equivalent name at another institution) is a major operation at Harvard and at Defendants. At Harvard, we relied on a large alumni-donor staff to try to maximize the percentage of each prior class that donated, and of course to maximize total donations from alumni and the parents of current and former students. We also identified particular areas of focus and relied on a discrete alumni staff to solicit and maximize donations towards that area over a multi-year fundraising campaign. Of particular note were the “whales,” whose net worth totaled over \$50 million. My understanding is that Defendants employ similar techniques and have large staffs to do the same thing.

E. Intellectual Property Royalties

54. Universities, public and private, have increasingly licensed their intellectual property (IP) to maximize IP royalties. For instance, Harvard recruited a top IP licensing executive who had assisted in the patenting of a blockbuster drug at Columbia. At the time, Dr. Larry Summers, upon becoming President of Harvard, once said to his senior staff at a meeting where I was in attendance: “I’m not interested in IP unless it brings in \$100M + in revenue so

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we can compete with MIT.” This executive soon embedded staff within the academic departments and research labs to comb through what could be considered IP and find ways to commercialize it. This aggressive stance was not always welcomed by the more passive, less financially oriented faculty in FAS, but proved to be a successful strategy in short order. Before Dr. Summers’s tenure, Harvard was far behind MIT in generating IP licensing revenue, but within a few years, we had come close to catching up. Among the Defendants the same has occurred; for example, in fiscal year 2021, Penn earned close to \$1 billion in royalties from the development of RNA vaccine technology that Moderna and Pfizer used to create their COVID-19 vaccine (Brubaker, 2022). Penn reported that the RNA-related revenue pushed its “Other Revenue” from \$1.3 billion to \$1.8 billion between fiscal year 2020 and 2021 (University of Pennsylvania, 2021, p. 7).⁸ Northwestern has made over \$1.4 billion in recent revenues from royalties and rights to the drug Lyrica (Schwartz, 2016). In recent years, even schools without such blockbuster drugs report nearly or over \$100 million a year in licensing revenue (Schwartz, 2023; Vanderbilt University, 2023).

F. Athletic Revenue

55. As at Harvard, each of the Defendants receive revenue from hosting athletic events. Many of the Defendants receive money for television rights, especially for football and men’s and women’s basketball. I understand that more recently, Harvard relied on sophisticated lawyers and our administrators to negotiate lucrative television deals, because maintaining strong athletic performance was a critical piece of the Ivy League brand. Certain of the Defendants in

⁸ Although the university has said that the money from the RNA IP is being put back into further research (Penn Center for Innovation, 2022), based on what I know about how university research operates, it is likely that at least some of these funds displace other revenue sources, releasing more revenues to support other university operations.

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this case, such as Notre Dame, Duke, Northwestern, Georgetown, and Vanderbilt, earn substantially more from televised athletic events featuring their schools. Schools like Duke and Vanderbilt earn over \$100 million a year in athletic revenues, and Georgetown earns over \$60 million a year in athletic revenue (Table 4).

G. Financial Reporting

56. Private universities, including Harvard and the Defendants, provide annual financial reports, including income statements and balance sheets, in accordance with accounting standards set by the Financial Accounting Standards Board (FASB), which are similar to standards used in public company financial reporting.⁹ Private universities also provide and make publicly available annual, detailed financial disclosures to the Internal Revenue Service, on Form 990. This form contains answers to multiple financial questions, details information about the university's governance, lists the compensation of the university's trustees or board members and most highly paid executives, and provides detailed balance sheets and income statements.

57. At Harvard, we made it one of our goals to be able to report on our public financial statements that annual revenues at least exceeded annual expenditures. One of the reasons we had that goal was that we believed our donors would regard our schools more favorably, as a well-run organization, if we could earn a surplus over expenses. From my dealings with my counterparts at Harvard's primary peer institutions and my experience in higher education, I believe Defendants had a similar objective and rationale for achieving it. This positive balance was known as "net asset," and we wanted this number to be positive in order to demonstrate prudent cost management and expense planning.

⁹ Public universities, like state and local governments, report their financials under the standards of the Government Accounting Standards Board, or GASB, which are closely aligned with FASB standards.

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VII. Ways in Which Defendants Compete for Personnel, Prestige, and Endowment Size

A. Competition for Personnel

58. Like private companies, Harvard and the Defendants must pay competitive salaries to their personnel who are essential to achieve the universities objectives. Elite, highly selective, private national universities acquire and maintain that status of excellence by attracting the very best students, which in turn requires the universities to attract and retain top talent at all positions, both teaching and administrative. Competition is intense on compensation packages for these individuals, which include not only salaries but also benefits, especially for housing. Indeed, while I was at Harvard, the competition between Harvard and its primary peer institutions for undergraduate and professional school faculty was sufficiently intense that the dean of the law school discussed with me the idea of transforming some of the dormitory space used by Harvard undergraduates, almost 400-year-old buildings, into condominiums for faculty housing.

59. The battle for talent became more pronounced during the COVID pandemic as a higher percentage of eligible people left the work force. The number of requests I have received from search firms seeking talented CFOs and COOs for their university clients is startling. This is true at the public companies on whose boards I serve as well. The demand for top people to fill the CEO, CFO, and Chief Compliance Officers (CCOs) is high and the search for talent is wide. Salary and other non-salary compensation are critical components of this competition, both among universities and in the corporate world.

60. Competition is also fierce for other senior personnel, especially managers of endowment, who typically earn far more than even university presidents. Universities, especially those with large endowments like Harvard and Defendants, must compete with for-profit

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companies for top investment management talent. Indeed, university endowment officers are often from the for-profit financial sector as well, including such well-known companies as Fidelity, DE Shaw and PIMCO.

61. Indeed, the sense of competition was evident everywhere at the University. We competed for the best faculty, staff, athletic coaches, theatre groups, and so on. The University engaged in, and was known for, “poaching” entire departments of faculty members from competing schools by offering enormous start-up and retention packages.

62. As examples of the strength of competition for talent, Table 1 reports the most highly compensated positions at Defendant universities for 2022, together with the total revenue earned by each university in that year. It should be noted that at virtually all of these institutions, the President was *not* the most highly compensated officer of university employee. Rather, the manager of the university’s endowment fund often is the most highly compensated.

63. For comparison, Table 2 reports the year-end 2022 revenue and salaries, including non-salary compensation (primarily stock options) of the CEOs at a sampling of public companies, who are among the highest paid employees at these organizations. The key takeaway from the Tables 1 and 2 is that the most highly compensated individuals at Defendant universities fall within the same range of the compensation of the public company officials.

B. Prestige

64. Like Harvard, Defendants compete to enhance their prestige. These universities are highly selective in their admissions because they want to project an aura of exclusivity. Other things being equal, the more selective institutions are, the more prestigious they are in the eyes of admitted students, as well as among the faculty who teach them. At Harvard, and at the other elite private universities with whom I regularly met, as described in Paragraphs 15 and 16 above, it was taken as a given that those running these institutions were there in large part because of the

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prestige those institutions enjoyed and that it was core to all leaders' jobs to lead and operate their institutions to maintain and enhance each institution's prestige.

65. The competition for talent is part and parcel with the universities' pursuit of prestige. Attracting and retaining "top-tier" students and faculties are the biggest focuses in that regard. Attracting renowned scholars, distinguished faculty, and big names, the thinking goes, attracts high-achieving students, creating a feedback loop of excellence and prestige, as renowned faculty want to work with high-achieving students. Attracting top-tier talent also encourages the feedback loop because successful graduates become ambassadors of the university's brand, often contributing back to their alma mater in the form of donations, which can be used to fund scholarships, new programs, and infrastructural developments. Some percentage of these alumni would likely reach "whale" status in their lifetime.

66. Competing to maximize prestige also requires top-tier facilities and infrastructure. Investment in cutting-edge technology, modern classrooms, and luxurious residential colleges aims to provide an unmatched educational and living experience. This not only improves the quality of education but also makes the campus more appealing to prospective students and faculty.

C. Endowments

67. Based on my experience, Defendant universities competed to have both large endowments per student and large annual endowment returns. This was done through such means as engaging in comprehensive, multi-year fundraising campaigns for gifts that can enlarge the endowment principal. Indeed, the Defendants limited their use of endowment principal more than fiscally necessary, so that the principal would increase, not decline, and so that the next year's growth would be ever more impressive.

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68. For example, in my meeting at the HMC, the president and the board would regularly compare our endowment size per student, new contributions to the endowment, and endowment investment performance with many other elite, private universities. They would also compare the size and number of donations in ongoing campaigns. If Harvard were lagging along these dimensions, participants would focus on ways to improve. Based on my interactions with financial leaders at other elite universities, including many of the Defendants in this case, I learned that they did the same thing, too, which is consistent with record evidence.¹⁰ Of particular note at Harvard was a statistic often used in marketing materials—endowment dollar per student.

VIII. Institutional Financial Aid is Accounted for as a Price Discount

69. For universities like Harvard and the Defendants to maintain their status, they must admit and enroll the most talented students they can attract. Doing so requires discounting charges for tuition and other components of the COA. Otherwise, large numbers of highly talented students cannot afford the sticker prices.

70. While price discounts are widely referred to as “institutional financial aid,” this is really a misnomer. Institutional financial aid, in substance and as a matter of proper financial reporting, is a discount off sticker price. As such, discounts reduce reported revenue. Institutional financial aid is not an “expense.” This is how we accounted for institutional financial aid—as price discounts—in Harvard’s financial statements. It is my understanding that Defendants’ accounting treatment in this regard was the same.

¹⁰ VANDERBILT-00031191; GTWNU_0000361899; RICE_LIT0000037233; NULIT-0000146706; DARTMOUTH_0000050515.

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71. Given the long time horizons under which well-endowed private universities operate, any single-year snapshot compares the costs of educating students in any part of the university, including undergraduate education, to the net tuition recorded in that year. That is because the education students receive at elite, highly selective, private national universities, such as at Harvard and at the Defendant institutions, prepares them for success later in life—in their personal lives and professionally, as reflected in their post-graduation lifetime earnings. These universities generate a great deal of loyalty among their graduates, reflected in the willingness of large numbers of graduates to “give back” to their universities over their lives. Some graduates will become very wealthy “whales” and give very large gifts, either or both in annual donations and to the endowment.

72. At Harvard, during the time I was there, and to my knowledge, this practice still continues; the importance of giving back to the university post-graduation is instilled on day one of freshman year. During the Convocation Ceremony, the development office representatives make a presentation on the importance of giving back the privilege that each student was on the precipice of receiving. Harvard’s development office counted funds raised over the lifetime of the donor, starting on day one—convocation. The contributions made by donors were touted in articles in Harvard Magazine through charts, graphs, and profiles on the donor and his or her family (particularly if they were a legacy alum). The sense of “competition,” while a source of boastful pride, was particularly pronounced in fundraising efforts among the classes. My understanding, based on my experiences in higher education and with Harvard’s primary peers, is that the importance of “giving back” to universities is inculcated at Defendant institutions as well.

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73. Accordingly, from purely a long-run financial perspective, annual tuition paid by students and their families, including discounted tuition and other charges for students not charged full price, is only one, often small, component of the funds that students pay *over their lifetimes* for an education, and the accompanying networking benefits supplied by elite, highly selective, private national universities. At Harvard, therefore, we commonly referred to our students as the “seed corn” for potentially large future crops of funds. Put another way, the business model at Harvard, and I believe this is true for the Defendants, is analogous to a venture capital fund: it only takes one “winner” out of the many investments made out of a single fund to more than compensate the investors in the fund for risking their capital.

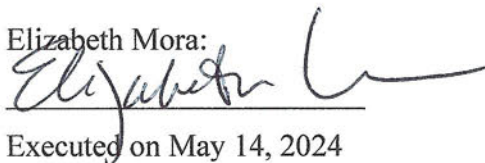
74. Viewed this way, institutional financial aid, or price discounting, at elite, highly selective, private national universities is not an altruistic endeavor, but rather is part of a business strategy to help finance that university, and its excellence, into perpetuity.

75. Price discounting for students should be differentiated from contributions that universities may make to charities and their local communities, which are more altruistic in nature—although not even these contributions are “purely” altruistic because the contributions would reflect well on the university and enhance its goodwill in the local community and beyond.

IX. Evidence and the Class

75. The evidence and opinions I advance in this report, to my knowledge, are common to all Class members.

Elizabeth Mora:

A handwritten signature in black ink, appearing to read 'Elizabeth Mora', written over a horizontal line.

Executed on May 14, 2024

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Table 1 – University Statistics

Institution	FY 2022 Revenue (millions)	FY 2022 Revenue from Government Grants (million)	Salary of Chief Investment Officer (Or Equivalent Position)	Salary of University President	Number of Employees
Brown University	\$1,790	\$263	\$2,996,245	\$2,046,296	11,084
California Institute of Technology	\$3,616	\$337	\$2,673,947	\$2,283,897	11,656
University of Chicago	\$4,613	\$1,581	\$5,235,336	\$3,813,941	26,838
Columbia University in the City of New York	\$7,109	\$1,213	\$2,588,466	\$3,879,804	37,144
Cornell University	\$6,500	\$16	\$2,422,165	\$1,549,470	41,865
Dartmouth College	\$1,952	\$138	\$1,804,722	\$1,718,550	9,263
Duke University	\$4,604	\$969	\$2,960,743	\$2,006,082	29,863
Emory University	\$6,366	\$821	\$7,854,449	\$2,217,287	24,580
Georgetown University	\$1,988	\$232	\$1,208,865	\$1,577,486	14,561
Harvard University	\$9,623	\$619	Undisclosed	\$1,330,200	34,241
The Johns Hopkins University	\$8,434	\$1,251	\$3,741,371	\$3,684,886	47,527
Massachusetts Institute of Technology	\$6,378	\$433	\$3,108,210	\$1,626,565	25,671
Northwestern University	\$4,010	\$398	\$1,587,730	\$2,995,976	24,446
University of Notre Dame du Lac	\$3,495	\$110	\$3,132,935	\$1,365,613	16,718
University of Pennsylvania	\$11,078	\$96	\$7,380,265	\$22,892,227	23,374
William Marsh Rice University	\$1,372	\$126	\$1,254,590	\$2,264,425	8,410

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Institution	FY 2022 Revenue (millions)	FY 2022 Revenue from Government Grants (million)	Salary of Chief Investment Officer (Or Equivalent Position)	Salary of University President	Number of Employees
Vanderbilt University	\$3,316	\$186	\$4,434,365	\$2,216,923	12,902
Yale University	\$7,410	\$714	\$6,689,429	\$2,260,694	31,105

This table summarizes the information disclosed by the Form 990 filed by the respective institutions for 2022. These can be obtained at Cause IQ. (n.d.). *Nonprofit data.* <https://www.causeiq.com/directory/>.

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Table 2 – Company Statistics

Company/ Institution Name	FY 2022 Revenue (Millions)	Market Value (as of 3/31/2023) (Millions)	Number of Employees (2022)	FY 2022 CEO Compensation
Cintas	\$7,166.3	43,566.7	40,000	\$7,777,100
Arconic	\$7,504	\$2,690.7	13,900	\$7,770,214
Fidelity National Financial	\$15,643	13,849.6	28,290	\$7,710,841
Huntington Ingalls Industries	\$9,524	\$7991	44,000	\$7,378,378
Ameren	\$6,394	\$24,198.7	9,116	\$7,357,331
Activision Blizzard	\$8,803	\$62,559.7	9800	\$7,282,786
TravelCenters of America	\$7336.8	\$637.5	16540	\$7,278,620
ARKO	\$6,412.6	\$11,33.9	11,236	\$6,683,793
Alaska Air Group	\$6,176	\$7,314.3	21,691	\$6,487,981
Knight-Swift Transportation Holdings	\$5,998	\$8,386	27,650	\$6,365,202
Oshkosh	\$7,952.5	\$6703.7	15,00	\$6,360,245
Boise Cascade	\$7926.1	\$2,740.4	6,130	\$6,269,864
Masco	\$8,375	\$12,062.7	20,000	\$6,261,228
Owens & Minor	\$9,785.3	\$3,375.6	17,300	\$6,245,259
Insight Enterprises	\$9,436.1	\$3,745.1	11,624	\$6,217,650
Beacon Roofing Supply	\$6,820.4	\$4,175.9	6,676	\$5,915,124
Graybar Electric	\$8,767.3	-	8,800	\$5,216,156
Par Pacific Holdings	\$4,710.1	\$783.3	1336	\$5,058,869
GXO Logistics	\$7940	\$8,193	97,500	\$4,851,558
Bed Bath & Beyond	\$9,233	\$2,170.5	37,600	\$4,781,527
Darden Restaurants	\$7,196.1	\$16,980.9	156,883	\$4,709,282
Landstar System	\$6,540.4	\$5,600	1,399	\$4,574,748
Old Republic International	\$9,341.6	\$7,972.7	9,600	\$4,540,010
Erie Insurance Group	\$9,619.7	-	5,805	\$4,512,236

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Company/ Institution Name	FY 2022 Revenue (Millions)	Market Value (as of 3/31/2023) (Millions)	Number of Employees (2022)	FY 2022 CEO Compensation
Seaboard	\$9,229	\$4,881.6	13,200	\$4,053,546
JetBlue Airways	\$6,037	\$4,786.9	17,459	\$3,457,274
Autoliv	\$8,230	\$6,691.1	58,176	\$2,857,991
Chewy	\$8,890.8	\$17,147.3	21,300	\$2,481,735
A-Mark Precious Metals	\$7,613	\$890.5	347	\$1,661,309
KKR	\$26,141.3	\$51,542.9	3,238	\$1,463,000
NGL Energy Partners	\$5,243.2	\$288.6	997	\$1,178,219

Fortune (2023). *Fortune 500 – Fiscal Year 2022*. <https://fortune.com/ranking/fortune500/2022/search/>

Salary.com. (n.d.). www.salary.com. Data on salary comes from Salary.com; all other data was obtained from *Fortune*.

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Table 3 – Athletic Revenues

Institution	Total Revenue from Athletics (2023)
Brown University	\$36,265,052.00
California Institute of Technology	\$3,359,844.00
Columbia University in the City of New York	\$38,335,736.00
Cornell University	\$36,342,322.00
Dartmouth College	\$38,642,041.00
Duke University	\$152,509,818.00
Emory University	\$8,248,817.00
Georgetown University	\$68,972,755.00
Harvard University	\$39,568,660
The Johns Hopkins University	\$15,974,055.00
Massachusetts Institute of Technology	\$8,220,912.00
Northwestern University	\$117,587,514.00
University of Notre Dame du Lac	\$224,191,928.00
William Marsh Rice University	\$51,832,652.00
University of Chicago	\$9,630,489.00
University of Pennsylvania	\$46,277,380.00
Vanderbilt University	\$125,133,666.00
Yale University	\$75,637,664.00

U.S. Department of Education. (n.d.). <https://ope.ed.gov/athletics/#!/institution/search>

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Appendix A

Curriculum Vitae

Elizabeth Mora

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BOARD AND PROFESSIONAL EXPERIENCE

Board Director, Everest Consolidator Acquisition Corporation	2021 – Current
Board Director, Limoneira Company	2021 – Current
Board Director, Inogen, Inc.	2021 – Current
Advisory Board Member, Cambridge Trust Company	2018 – Current
Board Director, MKS Instruments, Inc.	2012 – Current
Chief Administrative Officer, The Charles Stark Draper Laboratory, Inc.	2008 – 2020
Chief Financial Officer, Harvard University	2006 – 2008
Associate Vice President, Research Administration, Harvard University	1997 – 2006
Senior Manager, National Regulatory Consulting Practice, PricewaterhouseCoopers International Limited	1989 – 1997

EDUCATION AND CERTIFICATIONS

MBA , Simmons College, Graduate School of Management, Boston, MA	1989
BA , University of California, Berkeley, CA	1982
Certified Public Accountant (Massachusetts)	

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Appendix B

RCP Client List at Coopers & Lybrand (PWC)

Bentley University
Bowdoin College
Catholic University
Cornell University Medical School
Creighton University
Dana Faber Cancer Research Institute
Emmanuel College
Georgia Tech Research Institute
Harvard Medical School
Northeastern University
Oklahoma State University
Philadelphia of College of Pharmacy and Science
University of Alabama, Birmingham
University of Chicago
University of Connecticut
University of Florida
University of Massachusetts Lowell
University of Minnesota School of Medicine
University of Southern Maine
Wake Forest University School of Medicine
Wellesley College
Wheelock College
Yale University
University of Kentucky
American Museum of Natural History

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Appendix C

Audit-Practice Client List at Coopers & Lybrand (PWC)

American Repertory Theatre (ART at Harvard)

Fidelity Investments

Harvard Magazine

Harvard Real Estate (HRE)

Kuzziel Electronics Company

Putnam Investments

Somerville Hospital

WR Grace Industries

SELF (Student Educational Loan Fund at Harvard Business School)

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Appendix D

Materials Reviewed and Relied Upon

Annual Reports

Brown University Annual Report, Fiscal Year 2022
California Institute of Technology Annual Report, Fiscal Year 2022 Columbia
University in the City of New York Annual Report, Fiscal Year 2022 Cornell
University Annual Report, Fiscal Year 2022
Dartmouth College Annual Report, Fiscal Year 2022
Duke University Annual Report, Fiscal Year 2022
Emory University Annual Report, Fiscal Year 2022
Georgetown University Annual Report, Fiscal Year 2022
Harvard University Annual Report, Fiscal Year 2022
The Johns Hopkins University Annual Report, Fiscal Year 2022
Massachusetts Institute of Technology, Annual Report, Fiscal Year 2022
Northwestern University Annual Report, Fiscal Year 2022
University of Notre Dame du Lac, Annual Report, Fiscal Year 2022
William Marsh Rice University Annual Report, Fiscal Year 2022
University of Chicago Annual Report, Fiscal Year 2022
University of Pennsylvania Annual Report, Fiscal Year 2022
Vanderbilt University Annual Report, Fiscal Year 2022
Yale University Annual Report, Fiscal Year 2022

Endowment Reports

Brown University Endowment Report, 2022
California Institute of Technology Endowment Report, 2022
Columbia University in the City of New York Endowment Report, 2022
Cornell University Endowment Report, Q1 2022
Cornell University Endowment Report, Q2 2022

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Cornell University Endowment Report, Q3 2022

Cornell University Endowment Report, Q4 2022

Dartmouth College Endowment Report, 2022

Duke University Endowment Report, 2022

William Marsh Rice Endowment Report, 2022

Form 990

Brown University Form 990, 2022

California Institute of Technology Form 990, 2022

Columbia University in the City of New York Form 990, 2022

Cornell University Form 990, 2022

Dartmouth College Form 990, 2021

Duke University Form 990, 2022

Emory University Form 990, 2022

Georgetown University Form 990, 2022

Harvard University Form 990, 2022

The Johns Hopkins University Form 990, 2022

Massachusetts Institute of Technology Form 990, 2022

Northwestern University Form 990, 2022

Williams Marshall Rice University Form 990, 2022

University of Chicago Form 990, 2022

University of Notre Dame Form 990, 2022

University of Pennsylvania Form 990, 2022

Vanderbilt University Form 990, 2022

Yale University Form 990, 2022

Production Documents

DARTMOUTH_0000050515

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DARTMOUTH_0000352935

GTWNU_0000361899

NULIT-0000146706

RICE_ LIT0000037233

VANDERBILT-00031191

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<https://news.vanderbilt.edu/2023/08/09/vanderbilt-generates-more-than-96m-in-licensing-revenue-in-fy23-most-in-university-history/>